

IN THE CLAIMS:

Please cancel claims 1-27 without prejudice to Applicants' rights thereto.

Claims 1-27 (cancelled)

Please add the following new claim:

28 (new) A method for monitoring bearing vibration levels associated with a rotating component and establishing an alarm setting therefor, the method comprising the steps of:

- a) measuring an operating parameter and a corresponding set of vibration amplitudes for a rotating component during a period of operation, the rotating component including a plurality of bearings and at least one sensor for measuring vibration amplitudes;
- b) selecting a bearing to be monitored from the plurality of bearings of the rotating component;
- c) selecting the vibration sensor to be used for monitoring the vibration amplitudes of the selected bearing;
- d) demodulate the set of measured vibration amplitudes monitored by the sensor;
- e) convert the demodulated set of measured vibration amplitudes into spectral data;
- f) compare the spectral data to predetermined tonal frequencies for the bearing so as to define a set of normalized amplitude data points; and
- g) trend the normalized amplitude data points over the period of operation so as to establish a time period remaining to reach an established amplitude limit.